

CLAIMS

What is claimed is:

1. A communication terminal device with a facsimile communication function in accordance with a V. 8 mode of ITU-T Recommendation, comprising:

a communication control unit for causing the communication terminal device to transmit a first type of DIS signal to which a bit indicating that a communication procedure in accordance with the V. 8 mode can be carried out is set, when the communication terminal device transmits a first ANSam signal, and cannot detect a CM signal within a prescribed period of time, and then causing to the communication terminal device to transmit a second type of DIS signal to which a bit indicating that the communication procedure in accordance with the V. 8 mode can be carried out is not set, in a case in which after transmission of the first type DIS signal, the communication terminal device receives a CI signal, and transmits a second ANSam signal, and does not detect a CM signal, and it is judged that the number of CI signals the communication terminal device has detected is equal to, or more than, a prescribed number.

2. The communication terminal device according to claim 1, wherein the communication control unit causes the communication terminal device to transmit a first type of DIS signal to which a bit indicating that the communication procedure in accordance with the V. 8 mode can be carried out is set, in a case other than a case in which it is judged that the number of CI signals the communication terminal device has detected is equal to, or more than, the prescribed number when the communication terminal device receives the CI signal, and transmits the second ANSam signal, and does not detect the CM signal.,

3. The communication terminal device according to claim 1, wherein when the communication terminal device detects the CM signal within the prescribed period of time after transmission of the first or second ANSam signal, the communication control unit causes the communication terminal device to transmit a JM signal, the V.8 mode is continued, and a facsimile reception process in accordance with a V.34 mode is carried out.

4. The communication terminal device according to claim 1, wherein the communication terminal device further possesses a facsimile communication function of a G3 method, and

wherein when the communication terminal device receives a DCS signal after transmission of the first or second type of DIS signal, a facsimile reception process in accordance with T.30 of the ITU-T Recommendation is carried out.

5. The communication terminal device according to claim 1, further including:

an operation unit for operating the communication terminal device; a faxmodem;

a network control unit for connecting the faxmodem to a public network in accordance with necessity;

a ROM for storing a program to be executed by the communication control unit;

a RAM for storing temporary data which is generated when the communication control unit executes the program stored in the ROM;

an image reading unit for reading an image;

an image memory for storing the read image to be transmitted, and an image the communication terminal device has received; and

an image recording unit for recording at least said received image.

6. The communication terminal device according to claim 5, further including a CD-ROM drive device into which a CD-ROM which has stored a communication control program can be inserted,

wherein the communication control program stored in the CD-ROM can be loaded onto the RAM.

7. The communication terminal device according to claim 5, further including a display unit for displaying operational condition of the communication terminal device.

8. The communication terminal device according to claim 5,
wherein the public network is a public switched telephone network or
a public digital line network.

9. A communication terminal device with a facsimile communication function in accordance with a V. 8 mode of ITU-T Recommendation, comprising:

communication control means for causing the communication terminal device to transmit a first type of DIS signal to which a bit indicating that a communication procedure in accordance with the V. 8 mode can be carried out is set, when the communication terminal device transmits a first ANSam signal, and cannot detect a CM signal within a prescribed period of time, and then causing the communication terminal device to transmit a second type of DIS signal to which a bit indicating that the communication procedure in accordance with the V. 8 mode can be carried out is not set, in a case in which after transmission of the first type DIS signal, the communication terminal device receives a CI signal, and transmits a second ANSam signal, and does not detect a CM signal, and it is judged that the number of CI signals the communication terminal device has detected is equal to, or more than, a prescribed number; and

means for connecting the communication terminal device to a public network.

10. The communication terminal device according to claim 9,
wherein the communication control means causes the communication
terminal device to transmit a first type of DIS signal to which a bit indicating
that the communication procedure in accordance with the V. 8 mode can be
carried out is set, in a case other than a case in which it is judged that the
number of CI signals the communication terminal device has detected is
equal to, or more than, the prescribed number when the communication
terminal device receives the CI signal, and transmits the second ANSam
signal, and does not detect the CM signal.

11. The communication terminal device according to claim 9, further including:

means for operating the communication terminal device;

first storing means for storing a program to be executed by the communication control means;

second storing means for storing temporary data which is generated when the communication control means executes the program stored in the first storing means;

means for reading an image;

means for storing the read image to be transmitted, and an image the communication terminal device has received; and

means for recording at least said received image.

12. The communication terminal device according to claim 11, further including means for displaying operational condition of the communication terminal device.

13. The communication terminal device according to claim 9,
wherein the public network is a public switched telephone network or
a public digital line network.

14. A facsimile communication method in accordance with a V. 8 mode of ITU-T Recommendation, comprising the steps of:

transmitting a first ANSam signal;

transmitting a first type of DIS signal to which a bit indicating that a communication procedure in accordance with the V. 8 mode can be carried out is set, if a CM signal cannot be detected within a prescribed period of time after transmission of the first ANSam signal;

transmitting a second ANSam signal if a CI signal is received after transmission of the first type of DIS signal; and

transmitting a second type of DIS signal to which a bit indicating that a communication procedure in accordance with the V. 8 mode can be carried out is not set, if a CM signal cannot be detected after transmission of the second ANSam signal, and the number of detected CI signals is equal to, or more than, a prescribed number.

15. The communication method according to claim 14 further including the step of:

transmitting a first type of DIS signal to which a bit indicating that the communication procedure in accordance with the V. 8 mode can be carried out is set, and in a case other than a case in which the number of detected CI signal is equal to, or more than, the prescribed number when the CM signal cannot be detected after the transmission of the second ANSam signal.

16. The communication method according to claim 14, further including the steps of:

transmitting a JM signal if the CM signal is detected;

continuing the V.8 mode thereafter; and

carrying out a facsimile reception process in accordance with a V.34 mode.

17. The communication method according to claim 14, further including the step of carrying out a facsimile reception process in accordance with T.30 of the ITU-T Recommendation if a DSC signal is received after transmission of the first or second type of DIS signal.

18. A storing medium storing a communication control program to be executed by communication control means of a communication terminal device,

wherein said communication control program includes:

a first program code for causing a communication terminal device to transmit a first ANSam signal;

a second program code for causing the communication terminal device to transmit a first type of DIS signal to which a bit indicating that the communication procedure in accordance with the V. 8 mode can be carried out is set, if a CM signal cannot be detected within a prescribed period of time after transmission of the first ANSam signal;

a third program code for causing the communication terminal device to transmit a second ANSam signal if a CI signal is received after transmission of the first type of DIS signal; and

a fourth program code for causing the communication terminal device to transmit a second type of DIS signal to which a bit indicating that a communication procedure in accordance with the V. 8 mode can be carried out is not set, if a CM signal cannot be detected after transmission of the second ANSam signal, and the number of detected CI signals is equal to, or more than, a prescribed number.

19. The storing medium according to claim 18,

wherein said communication control program further includes a fifth program code for causing the communication terminal device to transmit a first type of DIS signal to which a bit indicating that the communication procedure in accordance with the V. 8 mode can be carried out is set, in a case other than a case in which the number of detected CI signals is equal to, or more than, the prescribed number when the CM signal cannot be detected after the transmission of the second ANSam signal.

20. The storing medium according to claim 18,

wherein the storing medium is an optical disk or a floppy disk.